





Robert Greene Sterne Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Akcorn Robert C. Millonig Donald J. Featherstone Lawrence B. Bugaisky Michael V. Messinger Judith U. Kim Timothy J. Shea, Ir. Patrick E. Garrett Heidi L. Kraus Edward W. Yee Albert L. Ferro* Donald R. Banowit Peter A. Jackman Teresa U. Medler Jeffrey S. Weaver Kendrick P. Patterson Vincent L. Capuano Kimber L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono Virgil Lee Beaston Kimberly N. Reddick Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Christine M. Lhulier Rae Lynn Prengaman Jane Shershenovich* George S. Bardmesser Daniel A. Klein* Jason D. Eisenberg Michael D. Specht Andrea J. Kamage Tracy L. Muller* LuAnne M. DeSantis John J. Figueroa Ann E. Summerfield Tiera S. Coston Aric W. Ledford* Jessica L. Parezo Timothy A. Doyle* Gaby L. Longsworth* Nicole D. Dretar* Ted J. Ebersole Jyoti C. Iyer* Registered Patent Agents • Karen R. Markowicz

Registered Patenia Agents: Karen R. Markowicz Nancy J. Leith Helene C. Carlson Marthew J. Dowd Aaron L. Schwartz Kattina Y. Pei Quach Bryan L. Skelton Robert A. Schwartzman Teresa A. Colella Jeffrey S. Lundgren Victoria S. Rutherford Eric D. Hayes Michelle K. Holoubek Robert H. DeSelms Simon J. Elliott Julie A. Heider Mita Mukherjee Scott M. Woodhouse

<u>Of Counsel</u> Kenneth C. Bass III Evan R. Smith Marvin C. Guthrie

*Admitted only in Maryland *Admitted only in Virginia •Practice Limited to Federal Agencies

July 7, 2004

WRITER'S DIRECT NUMBER: (202) 772-8835
INTERNET ADDRESS: TFIALA@SKGF.COM

Art Unit 2661

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Re:

U.S. Utility Patent Application

Appl. No. 10/809,893; Filed: March 26, 2004

For: Method and Apparatus for Maintaining Synchronization in a

Communication System

Inventors:

Kolze et al.

Our Ref:

1875.4070002

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. An original executed Power of Attorney from Assignee;
- 2. An original executed Certificate Under 37 C.F.R. § 3.73(b) from Assignee with a copy of the Assignment attached; and
- 3. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents July 7, 2004 Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERME, KESSLER, GOLDSKEIN & FOX P.L.L.C.

Thomas C. Fiala

Attorney for Applicants Registration No. 43,610

TCF/BSW/tc Enclosures

284439v1

POWER OF ATTORNEY FROM ASSIGNEE

Corporation, a corporation of California, having a principal place of business at 16215 Alton Parkway, Irvine, California 92618-3616, is assignee of the entire right, title, and interest for the United States of America (as defined in 35 U.S.C. §100), by reason of an Assignment to the Assignee executed on (1) March 26, 2004 (2) March 26, 2004 and (3) March 26, 2004, of an invention known as Method and Apparatus for Maintaining Synchronization in a Communication System (Attorney Docket No.1875.4070002), that is disclosed and claimed in a patent application of the same title by the inventors (1) Thomas Kolze (2) Bruce Currivan and (3) Niki Pantelias (said application filed on March 26, 2004 at the U.S. Patent and Trademark Office, having Application Number 10/809,893).

For the purpose of PAIR, the Customer Number is 26111.

The Assignee hereby appoint James D. Bennett, Registration No. 37,550, Jeffrey DeRoy Wheeler, Registration No. 39,066; Noel Benjamin Whitley, Registration No. 42,225; and Harry Shannon Tyson, Jr., Registration No. 42,193, of Broadcom Corporation, 16215 Alton Parkway, Irvine, CA 92618-3616, and the U.S. attorneys associated with CUSTOMER NUMBER 28393 to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith, such attorneys currently being: Robert Greene Sterne, Esq., Registration No. 28,912; Edward J. Kessler, Esq., Registration No. 25,688; Jorge A. Goldstein, Esq., Registration No. 29,021; David K.S. Cornwell, Esq., Registration No. 31,944; Robert W. Esmond, Esq., Registration No. 32,893; Tracy-Gene G. Durkin, Esq., Registration No. 32,831; Michele A. Cimbala, Esq., Registration No. 33,851; Michael B. Ray, Esq., Registration No. 33,997; Robert E. Sokohl, Esq., Registration No. 36,013; Eric K. Steffe, Esq., Registration No. 36,688; Michael Q. Lee, Esq., Registration No. 35,239; Steven R. Ludwig, Esq., Registration No. 36,203; John M. Covert, Esq., Registration No. 38,759; Linda E. Alcorn, Esq., Registration No. 39,588; Lawrence B. Bugaisky, Esq., Registration No. 35,086; Donald J. Featherstone, Esq., Registration No. 33,876; Robert C. Millonig, Esq., Registration No. 34,395; Michael V. Messinger, Esq., Registration No. 37,575; Judith U. Kim. Esq., Registration No. 40,679; Timothy J. Shea, Jr., Esq., Registration No. 41,306; Patrick E. Garrett, Esq., Registration No. 39,987.. The Assignees hereby grant said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send correspondence to:

Customer Number 26111 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 New York Avenue, N.W. Washington, D.C. 20005-3934

U.S.A.

Direct phone calls to 202-371-2600.

SIGNATUR

BY:

Dee Henderson

Manager, Intellectual Property Portfolio

DATE

PTO/SB/96 (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF Communication under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. 1875.4070002

STATEMENT UNDER 37 CFR 3.73(D)
Applicant/Patent Owner: Kolze et al.
Application No./Patent No.: 10/809.893 Filed/Issue Date: March 26, 2004
Entitled: Method And Apparatus For Maintaining Synchronization In A Communication System
Broadcom Corporation 8 Corporation (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that it is: 1. ☑ the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest. The extent (by percentage) of its ownership interest is ——————————————————————————————————
A. [x] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
OR
B. [] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:
The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
2. From:To:
The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
3. From:
The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
[] Additional documents in the chain of title are listed on a supplemental sheet.
[X] Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302.08]
The undersigned (whose title is supplied below) is authorized to act on betralf of the assignee. Tuke your Date OHY 9W5950
Telephone number Signature Manage LP Jo Holl O

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. VA 22313-1450.

DO NOT FORWARD TO ASSIGNMENT BRANCH NOT FOR RECORDATION

ASSIGNMENT

In consideration of the sum of One Dollsr (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: Thomas Kolze, Bruce Currivan and Niki Pantelias, the undersigned inventors hereby sell and assign to Broadcom Corporation, a corporation formed under the laws of California (the Assignce) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

- (a) in the invention(s) known as Method and Apparatus for Maintaining Synchronization in a Communication System for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 26 MAR, 2007, and (also known as United States Application No. , filed (herewith), in any and all applications thereon, in any and all Letters Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including non-provisional applications, continuing (continuation, divisional, or continuation-in-part) applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignce in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant James D. Bennett, Registration No. 37,550, Jeffrey DeRoy Wheeler, Registration No. 39,066; Noel Benjamin Whitley, Registration No. 42,225; and Harry Shannon Tyson, Jr., Registration No. 42,193, of Broadcom Corporation, 16215 Alton Parkway, Irvine, CA 92618-3616, and Robert Greene Steme, Esq., Registration No. 28,912; Edward J. Kessler, Esq., Registration No. 25,688; Jorge A. Goldstein, Esq., Registration No. 29,021; David K.S. Cornwell, Esq., Registration No. 31,944; Robert W. Bsmond, Esq., Registration No. 32,893; Tracy-Gene G. Durkin, Esq., Registration No. 32,831; Michael A. Cimbala, Esq., Registration No. 33,851; Michael B. Ray, Bsq., Registration No. 33,997; Robert E. Sokoht, Esq., Registration No. 36,613; Eric K. Steffe, Esq., Registration No. 36,688; Michael Q. Lee, Esq., Registration No. 35,239; Steven R. Ludwig, Esq., Registration No. 36,203; John M. Covert, Esq., Registration No. 38,759; Linda E. Alcorn, Esq., Registration No. 39,588; Lawrence B. Bugaisky, Esq., Registration No. 35,086; Donald J. Featherstone, Esq., Registration No. 33,876; Robert C. Millonig, Esq., Registration No. 34,395; Michael V. Messinger, Esq., Registration No. 37,575; Judith U. Kim, Esq., Registration No. 40,679; Timothy J. Shea, Jr., Esq., Registration No. 41,306; Patrick E. Garret, Esq., Registration No. 39,987; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Washington, D.C. 20005-3934, power to insert in this assignment any further Identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Page 1 of 2

IN WITNESS WHEREOF, executed b	y the undersigned inventors on the date opposite his/ner name.
Date: 26 MAR 2004	Signature of Inventor: Thomas Kolze
Date:	Signature of Inventor: Bruce Currivan
Date:	Signature of Inventor: Niki Pantelias
243264v1	

P.04

DO NOT FORWARD
TO ASSIGNMENT BRANCH
NOT FOR RECORDATION

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: Thomas Kolze, Bruce Currivan and Niki Pantellas, the undersigned inventors hereby sell and assign to Broadcom Corporation, a corporation formed under the laws of California (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

(b) in any and all applications that claim the benefit of the patent application listed above in part (a), including non-provisional applications, continuing (continuation, divisional, or continuation-in-part) applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant James D. Bennett, Registration No. 37,550, Jeffrey DcRoy Wheeler, Registration No. 39,066; Nocl Benjamin Whitley, Registration No. 42,225; and Harry Shannon Tyson, Jr., Registration No. 42,193, of Broadcom Corporation, 16215 Alton Parkway, Irvine, CA 92618-3616, and Robert Greene Sterne, Esq., Registration No. 28,912; Edward J. Kessler, Esq., Registration No. 25,688; Jorge A. Goldstein, Esq., Registration No. 29,021; David K.S. Comwell, Esq., Registration No. 31,944; Robert W. Bennond, Esq., Registration No. 32,893; Tracy-Gene G. Durkin, Esq., Registration No. 32,831; Michaele A. Cimbala, Esq., Registration No. 33,851; Michael B. Ray, Esq., Registration No. 33,997; Robert E. Sokohl, Esq., Registration No. 36,013; Eric K. Steffe, Esq., Registration No. 36,688; Michael Q. Lee, Esq., Registration No. 35,239; Steven R. Ludwig, Esq., Registration No. 36,203; John M. Covert, Esq., Registration No. 38,759; Linda E. Alcom, Esq., Registration No. 39,588; Lawrence B. Bugaisky, Esq., Registration No. 35,086; Donald J. Featherstone, Esq., Registration No. 33,876; Robert C. Millonig, Esq., Registration No. 34,395; Michael V. Messinger, Esq., Registration No. 37,575; Judith U. Kim, Esq., Registration No. 40,679; Timothy J. Shea, Jr., Esq., Registration No. 41,306; Patrick E. Garrett, Esq., Registration No. 39,987; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Washington, D.C. 20005-3934, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Page 1 of 2

IN WITNESS WHEREOF, executed by the undersigned inventors on the date opposite his/her name.

Date:	Signature of Inventor:
Date: 3/26/04	Signature of Inventor: Brace Carrivan
Date:	Signature of Inventor; Niki Pantelias

243264v1

TO 12023712540

P.02/09

DO NOT FORWARD
TO ASSIGNMENT BRANCH
NOT FOR RECORDATION

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: Thomas Kolze, Bruce Currivan and Niki Pantelias, the undersigned inventors hereby sell and assign to Broadcom Corporation, a corporation formed under the laws of California (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages, for the United States of America (as defined in 35 U.S.C. § 100) and throughout the world,

(a) in the invention(s) known as Method and Apparatus for Maintaining Synchronization	in s
Communication System for which application(s) for patent in the United States of America has	have)
been executed by the undersigned on, and Mar. 76, 2004	(also
known as United States Application No. , filed (herewith), in any and all applic	ations
thereon, in any and all Letters Patent(s) therefor, and	

(b) in any and all applications that claim the benefit of the patent application listed above in part (a), including non-provisional applications, continuing (continuation, divisional, or continuation-in-part) applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignce may deem necessary or expedient.

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any non-provisional, continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant James D. Bennett, Registration No. 37,550, Jeffrey DeRoy Wheeler, Registration No. 39,066; Noel Benjamin Whitley, Registration No. 42,225; and Harry Shannon Tyson, Jr., Registration No. 42,193, of Broadcom Corporation, 16215 Alton Parkway, Irvine, CA 92618-3616, and Robert Greene Sterne, Esq., Registration No. 28,912; Edward J. Kessler, Esq., Registration No. 25,688; Jorge A. Goldstein, Esq., Registration No. 29,021; David K.S. Cornwell, Esq., Registration No. 31,944; Robert W. Esmond, Esq., Registration No. 32,893; Tracy-Gene G. Durkin, Esq., Registration No. 32,831; Michele A. Cimbala, Esq., Registration No. 33,851; Michael B. Ray, Esq., Registration No. 33,997; Robert E. Sokohl, Esq., Registration No. 36,013; Eric K. Steffe, Esq., Registration No. 36,688; Michael Q. Lee, Esq., Registration No. 35,239; Steven R. Ludwig, Esq., Registration No. 36,203; John M. Covert, Esq., Registration No. 38,759; Linda E. Alcorn, Esq., Registration No. 39,588; Lawrence B. Bugaisky, Esq., Registration No. 35,086; Donald J. Featherstone, Esq., Registration No. 33,876; Robert C. Millonig, Esq., Registration No. 34,395; Michael V. Messinger, Esq., Registration No. 37,575; Judith U. Kim, Esq., Registration No. 40,679; Timothy J. Shea, Jr., Esq., Registration No. 41,306; Patrick E. Garrett, Esq., Registration No. 39,987; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Washington, D.C. 20005-3934, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Page 1 of 2

. IN WITNESS WHEREOF, executed by the undersigned inventors on the date opposite his/her name.

Date:	Signature of Inventor: Thomas Kolze
Date: Mar. 26, 2004	Signature of Inventor: Bruce Currivar Signature of Inventor:
Date. 1100 1 Del	Niki Pantelias

245131v1